

CLAIM AMENDMENTS

Please replace the currently pending claims with the following claim listing:

1-17. (Cancelled)

18. (New) An optical switch, comprising:

an input array and an output array of optical elements;

a space between the input and output array, whereby said input array of optical elements is spaced from said output array;

means for directing radiation beams; and

a further array of optical elements optically located between said input and output arrays;

wherein the pitch of the optical elements of said further array of optical elements is inferior to the pitch of at least one of said input array and said output array.

19. (New) A switch according to claim 18, wherein said further array of optical elements

is located where optical paths cross each other.

20. (New) A switch according to claim 18, wherein said further array of optical elements

is located in the gaps between where the optical paths cross each other.

21. (New) A switch according to claim 18, wherein said further array of optical elements has the primary function of reforming the beams and is placed at a location in said space between the inputs and outputs where reforming the beams allows the achievable optical path length between the input and output arrays to be greater than the optical path length achievable without said further array of elements.

22. (New) A switch according to claim 21, wherein said further array of optical elements is located substantially at the centre of the space between the inputs and outputs and the pitch of the elements is substantially half the pitch of at least one of said input array and said output array of optical elements.

23. (New) A switch according to claim 21, wherein said further array of optical elements is located substantially at a third of the optical path length from at least one of said input array and said output array of optical elements and the pitch of the elements is substantially a third of the pitch of said array of optical elements.

24. (New) A switch according to claim 23, wherein a second further array of optical elements is located substantially at a third of the optical path length from the input array of optical elements provided said first further array is located a third of the optical path length from the output of optical elements.

25. (New) A switch according to claim 21, wherein said further array of optical elements is located substantially at a quarter of the optical path length from at least one of said input array and said output array of optical element and the pitch of the elements is substantially a quarter of the pitch of said array of optical elements.

26. (New) A switch according to claim 18, wherein said further array of optical elements is a reflective array.

27. (New) A switch according to claim 18, wherein said further array of optical elements is a striped mirror.

28. (New) A switch according to claim 18, wherein said further array of optical elements is a lenslet array.

29. (New) A switch according to claim 18, wherein said further array of optical elements consists of a combination of at least any two of the following elements: striped mirror, lenslet and reflective element.

30. (New) A switch according to claim 18, wherein radiation is inputted to the switch via collimators onto an array of tilting mirrors.

31. (New) A switch according to claim 18, wherein the input array incorporates collimators adapted to be displaced in a rocking motion within a given pitch, the optical pitch of the further array of elements being substantially half the pitch of the collimators and the further array of elements being located substantially halfway between the input and output array.

32. (New) A switch according to claim 18, wherein the input array incorporates collimators adapted to be displaced in a rocking motion within a given pitch, the optical pitch of the further array of elements being substantially one third of the collimators and the further array of elements being located substantially one third of the optical path length between the input and output array.

33. (New) A switch according to claim 18, wherein the input array incorporates collimators adapted to be displaced in a rocking motion within a given pitch, the optical pitch of the further array of elements being substantially one fourth of the collimators and the further array of elements being located substantially one fourth of the optical path length between the input and output array.